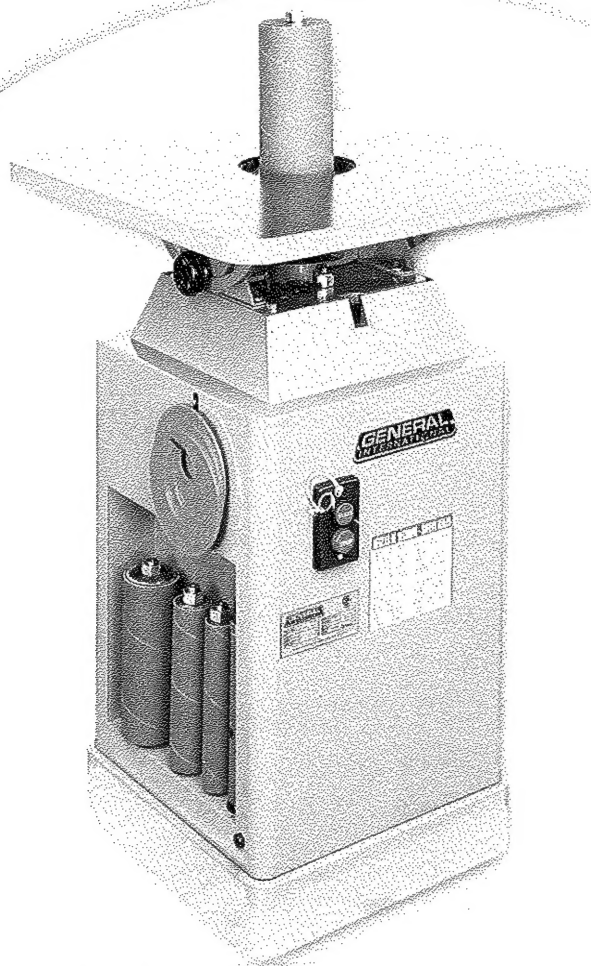




VERTICAL OSCILLATING SPINDLE SANDER 15-020

OPERATING MAINTENANCE INSTRUCTIONS



FEATURES

- Heavy-duty cast iron table and base.
- Three (3) interchangeable table inserts.
- Heavy duty oil bath gearbox.
- Dust hood is built under the table.
- Precision ball bearing in spindle for smooth and solid performance.
- Precision ground tilting table.
- Oil level sight gauge to allow instant check of oil level during operation.
- 10 interchangeable spindles from 1/4" to 4" including 1/4", 3/8", 1/2", 5/8", 3/4", 1", 1 1/2", 2", 3" & 4".
- Key switch with circuit breaker for overload protection.
- 1" to 4" spindle comes with rubber drum.

SPECIFICATIONS

OSCILLATIONS PER MINUTE	75
LENGTH OF OSCILLATION	1 1/2" (36 mm)
TABLE SIZES	24 1/2" x 24 1/2" (616 x 616 mm)
TABLE TILT	0° TO 45°
TABLE HEIGHT FROM FLOOR	39" (990 mm)
TABLE INSERTS	3
SPINDLE SIZES	1/4" TO 4" (6.2 TO 102 mm)
DUST CHUTE OUTLET	4" (102 mm)
SPINDLE SPEED	1725 RPM
MOTOR (PRE-WIRED 110 V)	1 HP, 110/220 V, 1 Ph, 10/5 AMP
WEIGHT	297 LBS (135 kgs)

SAFETY RULES

READ CAREFULLY BEFORE OPERATING THE MACHINE

1. Learn the machine's applications and limitations, as well as the specific potential hazards particular to this machine. Follow available safety instructions and safety rules carefully.
2. Keep working area clean and be sure adequate lighting is available.
3. Do not wear loose clothing, gloves, bracelets, necklaces, or ornaments. Wear face, eye, ear, respiratory and body protection devices, as indicated for the operation or environment.
4. Keep hands well away from cutters head and all moving parts. Do not clear chips and sawdust away with hands. Use a brush.
5. Make sure the spindles are moving at operation speed before using it.
6. Do not push too hard. The spindles will perform better and be safer working at the rate for which it was designed.
7. Whenever possible use a dust collector with shaving hood to minimize health hazards.
8. Never leave the machine with the power on.
9. Keep children away. Make sure that visitors are kept at a safe distance from the work area.
10. Use recommended speed for wood turning lathe accessory and workpiece material.
11. Never stand on tool. Serious injury could occur if the tool is tipped or if the sanding tool is unintentionally contacted.
12. Be sure sanding spindles are securely locked in the machine.
13. Use suitable support if stock does not have a flat surface.
14. Do not force the machine. It will do the job better and be safer at a rate for which it was designed.
15. Keep guards in place and in working order. If a guard must be removed for maintenance or cleaning make sure it is properly attached before using the tool again.
16. Be sure that key and adjusting wrenches have been removed before turning power on.
17. Use only accessories designed for the machine.
18. Make sure tool is properly grounded. If tool is equipped with three-prong plug, it should be plugged into a three-pole electrical receptacle. Never remove the third prong.
19. Always disconnect tool before servicing and when changing accessories such as spindle sizes.
20. Make sure that switch is in "OFF" position before plugging in cord.
21. Hold material firmly against the table.
20. Use ONLY recommended accessories. Use of accessories NOT recommended by General International may result in a risk of injury.
21. Do not use this spindle sander for other than it's intended use. If used for other purposes, General International disclaims any real or implied warranty and holds itself harmless for any injury, which may result from that use.

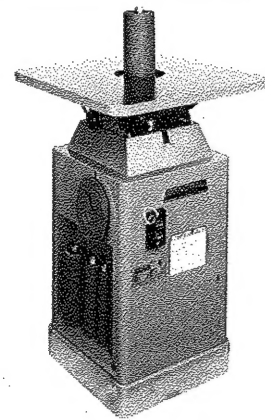
GENERAL ® INTERNATIONAL guarantee

All component parts of GENERAL INTERNATIONAL machinery are carefully inspected during all production stages and each machine is thoroughly inspected upon completion of assembly. Because of quality, GENERAL INTERNATIONAL agrees to repair or replace any genuine part or parts which, upon examination, proves to be defective in workmanship or material within a period of 24 months from date of purchase. In order to obtain warranty, all defective parts must be returned prepaid to GENERAL INTERNATIONAL MFG. Co Ltd. Repairs made without our written authorization voids all guarantees.

VERTICAL OSCILLATING SPINDLE SANDER

15-020

GENERAL® INTERNATIONAL spindle sanders are carefully tested and inspected before shipment and if properly used it will give perfect results. However, a reasonable amount of care and attention is necessary to ensure perfect performance and accurate work. It is imperative that you take a few moments to familiarise yourself with these instructions, as they will no doubt save you a lot of time and trouble.



- This machine has been designed for grinding, or polishing curves, and surfaces of wood, plastic, or metal materials.
- For process of irregular round curve workpieces, the machine provides an optional bench for adjustment to any degree of angle.
- To keep machine and parts in perfect condition, change oil lubricant after every 800 hours of operation.
- Caution the machine is equipped with ten sanding arbors, three round inserts and two open spanners, install them carefully and properly to avoid any cutting damage.
- When selecting a sanding arbor, it should depend on the size of the round curve of the polished workpiece. The sanding arbor should be smaller than the curve of the polished workpiece.
- It is recommended to mark on the workpiece before moulding, to ensure that while in process it follows your marks to give precise and correct results.

NOTE: Never attempt to ground or cut the workpiece with the powerful sanding arbor to achieve correctness and preciseness.

- Clean the sanding arbor and the main shaft hole, before inserting the sanding arbor into the main shaft.

NOTE: Never screw the sanding arbor tightly, otherwise it could not be taken off.

- After every use of the machine, clean and polish all parts. Polish bench with specialised oil, always re-adjust bench to proper position of 90° angle.

ATTENTION!

BEFORE OPERATING THIS MACHINE, HAVE ALL WORKERS AND OPERATORS READ THIS MANUAL ATTENTIVELY! AVOIDING THIS PROCEDURE CAN CAUSE SERIOUS DAMAGE TO MACHINE AND RISK PUTTING THE WORKER OR OPERATOR IN A DANGEROUS SITUATION!

UNPACKING AND CLEAN UP

To ensure maximum performance from your GENERAL INTERNATIONAL spindle sander, clean it properly; and install it accurately before use. As soon as you receive the spindle sander, we recommend you follow these procedures:

1. Finish removing the contents of the shipping carton and compare with the contents list.
2. Report damage, if any to your local distributor.
3. Clean all rust protected surfaces with a mild solvent or kerosene. Do not use lacquer thinner; paint thinner, or gasoline. These will damage painted surfaces.
4. To prevent rust, apply a light coating of paste wax to surface.

WARNING!

NEVER ATTEMPT TO CLEAN MACHINE WHEN IT IS PLUGGED INTO THE POWER SOURCE! IGNORING THIS PROCEDURE CAN CAUSE DAMAGE TO YOUR MACHINE, AND WILL PUT THE WORKER IN DANGEROUS SITUATION!

MAINTENANCE OF SPINDLE SANDER

1. To keep your spindle sander in perfect condition, clean machine and attachments at all times.
2. Clean tapered sleeves and tapered socket before every use, this will protect spindle sleeves from nicks.
3. Bent sleeves are easily straightened by placing them in the tapered socket and slipping a small pipe over the steel shaft. Using a dial indicator check that it is in correct position.
4. Check gearbox for proper oil level (Approx. 1/4 " up on sight glass).
5. We recommend that a small amount of grease be applied to table tilting screw once a month.
6. No lubrication is required for the bearings, they are permanently lubricated.

INSTRUCTIONS FOR OPERATIONS

1. Select a spindle that is smaller than the curve to be sanded.
2. Use an insert plate that comes closest to the spindle without touching it.
3. Make sure that spindle is properly positioned in taper sleeve socket. With the wrench provided, tighten the nut.
NOTE: Never over tighten, it may be difficult to remove the spindle later.
4. When table is set at a 90° angle, sanding may be done from any corner, or location on table around spindle.
5. When table is positioned at any angle other than 90°, it is necessary to position the work piece over the centre line, as shown on table surface.
6. Always lock the table with the hand nut when setting at any angle, also to prevent movement lock the tilting gear shaft.
7. Always loosen both table lock and tilting gear lock before changing the angle position of the table. Never force the table if it does not tilt easily, reason may be that the locks are still engaged. Never attempt to over ride the stop locks, this will cause damage to the tilting performance.
8. A backing board is recommended when sanding thin pieces of metal or any other material. A backing board can be easily constructed by using a piece of wood the length of the table, pushing it into the spindle until a half circle is formed. Clamp each end of the board to the table and proceed to sand the thin material.
9. Before leaving the machine remove any particles or pieces left over, always-return table to a 90° angle.

SELECTION GUIDE FOR TABLE DRUMS

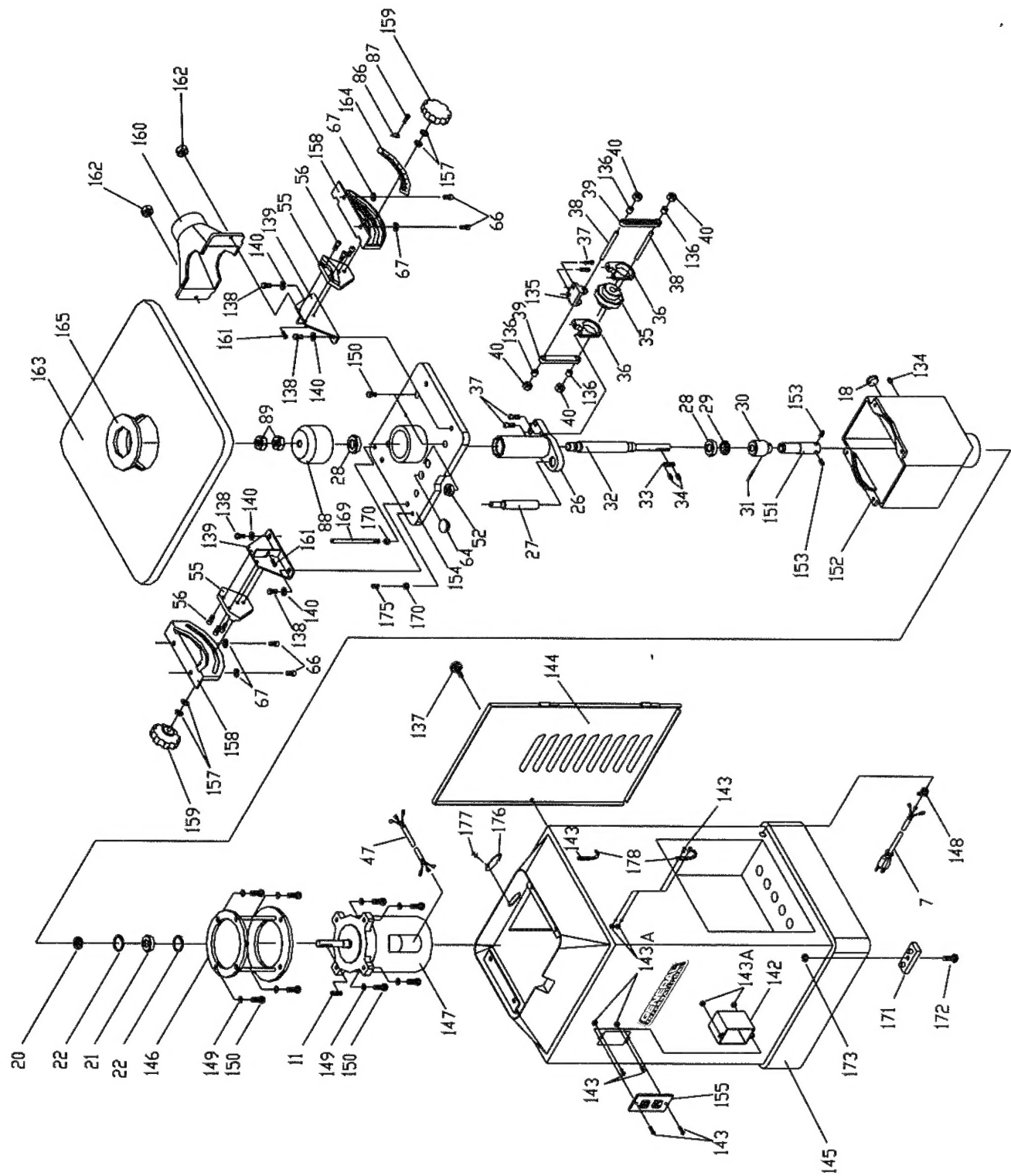
This machine is furnished with 10 drums, and three table inserts are supplied. The diameter of the drums range from 1/4" to 4". When drum diameter is changed, the table inserts will need to be changed to the appropriate size.

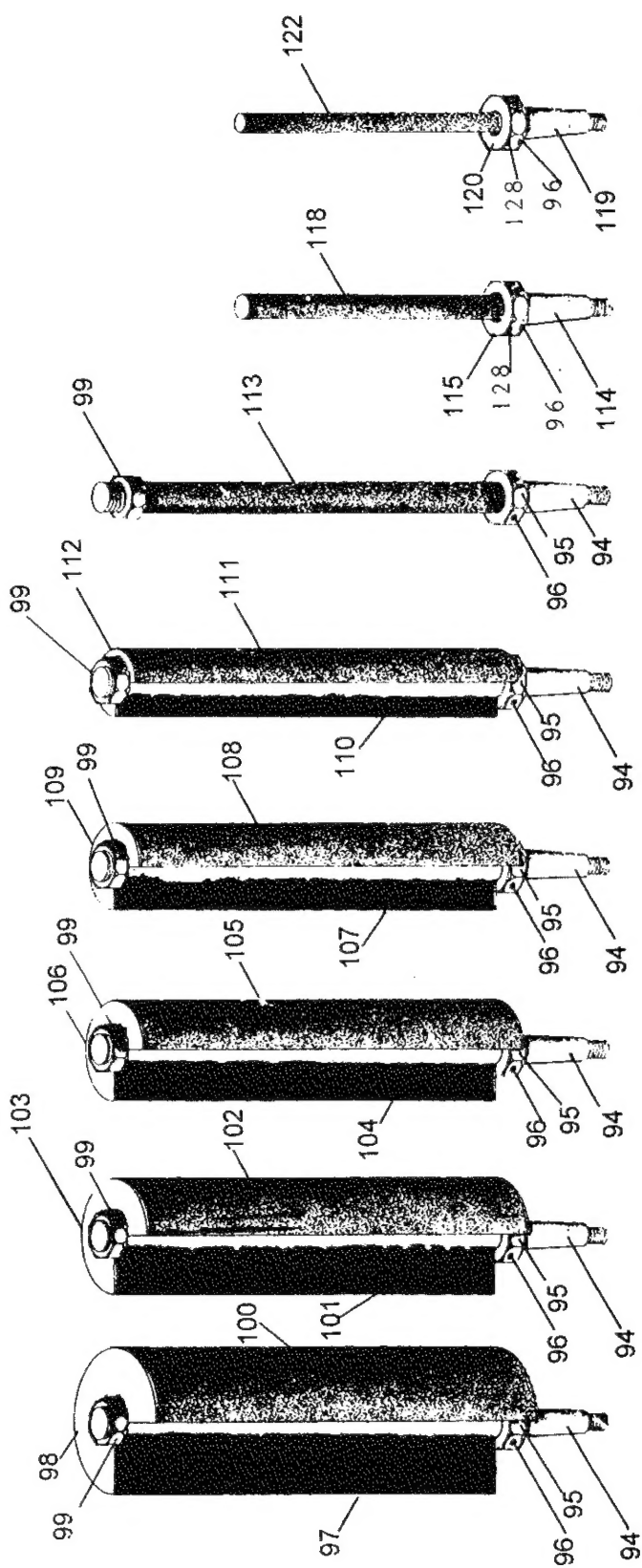
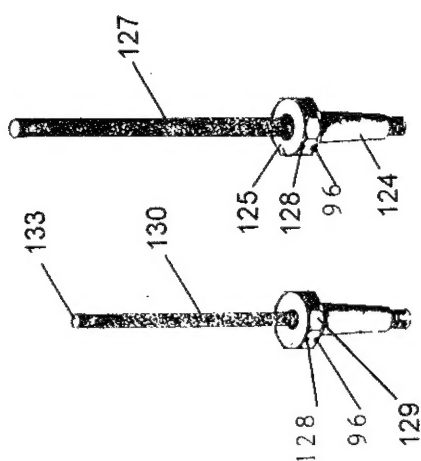
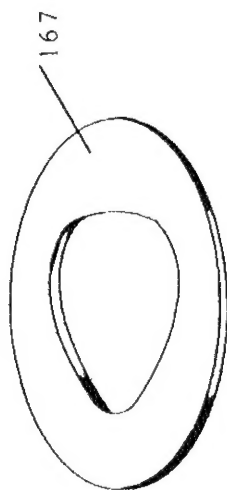
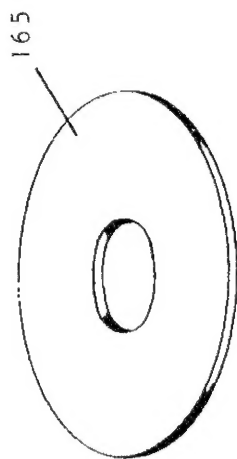
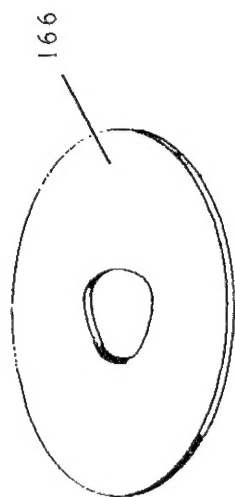
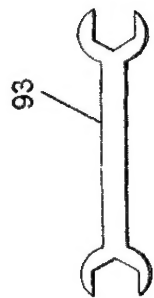
The following chart provides various inserts for different diameters.

MODEL NO.	DRUM DIAMETER	TABLE INSERT
15-021	1/4" DIAMETER X 5" LONG	#1
15-022	3/8" DIAMETER X 6" LONG	#1
15-023	1/2" DIAMETER X 6" LONG	#1
15-024	5/8" DIAMETER X 6" LONG	#1
15-026	3/4" DIAMETER X 9" LONG	#1
15-027	1" DIAMETER X 9" LONG	#2
15-028	1 1/2" DIAMETER X 9" LONG	#2
15-029	2" DIAMETER X 9" LONG	#3
15-031	3" DIAMETER X 9" LONG	NONE
15-032	4" DIAMETER X 9" LONG	NONE

WARNING!

FAILURE TO USE THE PROPER INSERT WITH THE CORRESPONDING DRUM MAY RESULT IN INJURY!





**PARTS LIST
15-020**

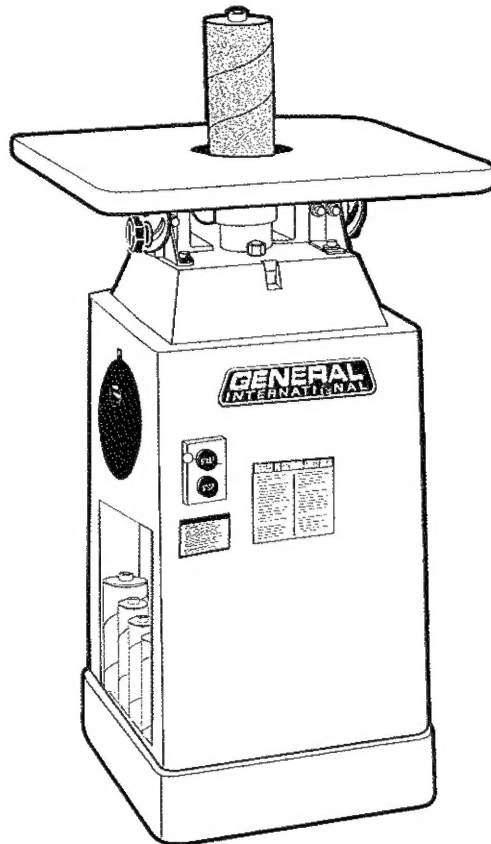
PART NO.	REF. NO.	DESCRIPTION	QTY
15020-007	L0000132	POWER CORD	1
15020-011	S0400525	KEY	1
15020-018	30101011	OIL INDICATOR	1
15020-020	30101014	OIL SEAL	1
15020-021	C1206206	BALL BEARING	1
15020-022	S0526500	C SNAP RING	2
15020-026	30103014	SLEEVE	1
15020-027	30103015	GUIDE RAIL SHAFT	1
15020-028	C1206205	BALL BEARING	2
15020-029	30103016	LOCKING NUT	1
15020-030	30103017	WORM	1
15020-031	S0310530	SPRING PIN	1
15020-032	30103018	MAIN SHAFT	1
15020-033	S0400550	KEY	1
15020-034	S0010210	HEX SOCKET CAP SCREW	2
15020-035	30103019	SPUR GEAR	1
15020-036	30103020	BRASS BUSHING	2
15020-037	S0010501	HEX SOCKET CAP SCREW	4
15020-038	30103021	TRANSMISSION ROD SHAFT	2
15020-039	30103022	TRANSMISSION ROD	2
15020-040	S0110600	LOCKING NUT	4
15020-047	L0000002	SWITCH CORD	1
15020-052	S0110503	LOCKING NUT	1
15020-055	30101029	REAR TRUNNION BRACKET	2
15020-056	S0010510	HEX SCREW	6
15020-064	30101035	OIL LID	1
15020-066	S0010610	HEX SOCKET CAP SCREW	4
15020-067	S0210600	WASHER	4
15020-086	40301032	WIDTH POINTER	1
15020-087	S0030304	SCREW	1
15020-088	30101049	CAP	1
15020-089	30101050	NUT	2
15020-093	30105054A	WRENCH	2
15020-094	30105055	ARBOR	6
15020-095	30105056	HEX NUT	6
15020-096	S0313525	SPRING PIN	10
15020-097	30105057	P.V.C 4"	1
15020-098	30105058	WASHER	2
15020-099	30105059	NUT	6
15020-100	30105060	SANDING CLOTH	1
15020-101	30105061	P.V.C 3"	1
15020-102	30105062	SANDING CLOTH	1
15020-103	30105063	WASHER	2
15020-104	30105064	P.V.C 2"	1
15020-105	30105065	SANDING CLOTH	1
15020-106	30105066	WASHER	2
15020-107	30105067	P.V.C 1 1/2"	1
15020-108	30105068	SANDING CLOTH	1
15020-109	30105069	WASHER	2
15020-110	30105070	P.V.C 1"	1
15020-111	30105071	SANDING CLOTH	1
15020-112	30105072	WASHER	2
15020-113	30105073	SANDING CLOTH	1
15020-114	30105074	ARBOR	1
15020-115	30105075	HEX NUT	1
15020-118	30105076	SANDING CLOTH	1

**PARTS LIST
15-020**

PART NO.	REF. NO.	DESCRIPTION	QTY
15020-119	30105077	ARBOR	1
15020-120	30105078	HEX NUT	1
15020-122	30105079	SANDING CLOTH	1
15020-124	30105080	ARBOR	1
15020-125	30105081	HEX NUT	1
15020-127	30105082	SANDING CLOTH	1
15020-128	S0050305	SCREW	4
15020-129	30105083	HEX NUT	1
15020-130	30105084	SANDING CLOTH	1
15020-133	30105085	ARBOR	1
15020-134	30101004	OIL PLUG	1
15020-135	30105087	BRASS BUSHING BRACKET	1
15020-136	30105088	SHAFT BRASS BUSHING	4
15020-137	30101005	KNOB	1
15020-138	S0010510	SCREW	4
15020-139	30101030A	BRACKET BASE	2
15020-140	S0210500C	WASHER	4
15020-142	10105052N	SWITCH BOX	1
15020-143	S0030324	SCREW	3
15020-143A	S0110300	NUT	3
15020-144	30101002J-1	VENT HOOD	1
15020-145	30101002G	COLUMN	1
15020-146	30101003A	MOTOR BRACKET	1
15020-147	M3131211E	MOTOR	1
15020-148	S1006PI	STRAIN RELIEF BUSHING	1
15020-149	S0230506	SPRING WASHER	8
15020-150	S0010501	HEX SCREW	12
15020-151	30102008A	COUPLING HEAD	1
15020-152	30101009A	TANK	1
15020-153	S0050404	SET SCREW	2
15020-154	30101013A	TANK LID	1
15020-155	W0000001	SWITCH	1
15020-155A	W0000009A	OVER LOAD ON MOTOR	1
15020-157	S0210600	WASHER	4
15020-158	30101033A	REAR TRUNNION	2
15020-159	30101031J	LOCKING KNOB	2
15020-160	30101034A	DUST COVER	1
15020-161	S0020501	HEX SCREW	2
15020-162	S0110500	NUT	2
15020-163	30101036A	WORKING TABLE	1
15020-164	30101047A	SCALE	1
15020-165	30105051A	TABLE INSERT (MEDIUM)	1
15020-166	30105052A	TABLE INSERT (SMALL)	1
15020-167	30105053A	TABLE INSERT (LARGE)	1
15020-169	30101027S	FIXED ROD	1
15020-170	S0110600	NUT	1
15020-171	10401029	RUBBER FEET	4
15020-172	S0030512	SINKING HEAD SCREW	4
15020-173	S0110500	NUT	4
15020-175	S0050505A	SET SCREW	1
15020-176	30101002G-1	OIL INDICATOR COVER	2
15020-177	S0720302	RIVET	1
15020-178	30101025Z	HOOK	1

NOTES

15-020



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IMPORTANT: When ordering replacement parts, always give the model number, serial number of the machine and part number. Also a brief description of each item and quantity desired.